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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,907	08/24/2001	Brad Davis	IP1-0101	3331

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EXAMINER

SING, SIMON P

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/938,907

Applicant(s)

DAVIS, BRAD

Examiner

Simon Sing

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8-16 and 18-22 is/are rejected.
- 7) ☒ Claim(s) 3, 7 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20050107</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 21 and 22 rejected under 35 U.S.C. 102(e) as being anticipated by Rong et al. US 6,775,548.

Rong discloses a method and system for accessing a telecommunications system by a mobile station 114 shown in figure 1. Rong teaches:

determining a output power head room for transmitting data over an access (low processing gain) channel, while a pilot (high processing gain) channel is active (column 6, lines 55-63), and transmitting data at a predetermined data rate if transmission power does not exceed the maximum output power, otherwise, transmitting data at a lower data rate based on the frame error rate at the receiver of a base station (column 8, lines 17-32, 49-67; column 8, lines 1-3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honkasalo US 6,137,789 in view of Rong et al. US 6,775,548.

Honkasalo discloses a method for selecting data rate in multi-channels transmission in a mobile station (which inherently has a transmitter and a receiver, see figure 1). Honkasalo teaches a plurality of supplemental code channels in parallel, acting as a single high data rate channel (low processing gain channel), for transmitting data with variable data rate based on how many channels are used (column 5, lines 58-65; column 7, table 1; column 8, lines 26-51). Honkasalo further teaches that if the power output of the mobile station is directed to increase beyond the maximum power allowed, transmission data rate in the parallel supplement channels is reduced by turning of one or more supplemental channels in order to maintain a suitable power level of a fundamental code channel (column 8, lines 15-22).

Honkasalo fails to teach that increase power output is the result of adding a low data rate channel.

However, Rong teaches a method of accessing a telecommunication system. Rong teaches that when a mobile station 114 (figure 1) is engaged in data communication, the mobile station 114 transmits access probe (inherently on a dedicated, or control channel (low data rate channel)) to a base station in response to a page received (column 7, lines 53-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Honkasalo's reference with

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teaching of Rong, so that a mobile station would have been directed to add a low data rate channel in response to a page received, because such modification would have enabled the mobile station to receive a voice call during data call.

3. Claims 2, 4, 5, 8-16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rong et al. US 6,775,548 in view of Honkasalo US 6,137,789.

3.1 Regarding claims 2 and 16, Rong discloses a method and system for accessing a telecommunications system by a mobile station 114 with a transmitter 204 and a receiver 206 shown in figure 1. Rong teaches:

determining a relative transmitter output power required for transmission over an access channel based upon a first data transmission rate for the access channel (column 6, lines 53-63; column 7, lines 37-47);

determining a projected output power required for transmission over all channels (pilot channel and access channel) to be transmitted based upon the relative transmitter output power required for transmission over the access channel at the first data rate (column 8, lines 51-56);

comparing the projected power to a maximum transmitter output power (column 8, lines 51-56); and

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selecting a second data transmission rate for the access channel if the projected power exceed the maximum transmitter output power (column 8, lines 56-67; column 9, lines 1-3).

Rong fails to teach measuring transmitter's output power due to transmission.

However, Honkasalo discloses a method for selecting data rate in multi-channels transmission in a mobile station 10 in figures 1-3. Honkasalo teaches a directional coupler 13 for measuring the actual transmitter output power in figure 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Rong's reference with teaching of Honkasalo, so that mobile station 114 would have included a directional coupler for measuring the transmitter's output power, because such modification would have provided feedback information to the transmit power control module 208 (figure 20) to prevent overloading the power amplifier 204.

3.2 Regarding claims 4 and 5, the modified Rong's reference, teaches a directional coupler for measuring transmitter out power, and since the directional coupler is located at the output of the power amplifier 204, a single channel's power, or a combined power of a plurality of channels are measured.

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3.3 Regarding claims 8 and 9, Rong teaches determining the power headroom for transmitting a predetermined data rate (column 8, lines 51-60), which inherently including transmission power of other channels.

3.4 Regarding claim 10, Rong teaches determining whether transmitting a predetermined data rate is within the power maximum transmission output power (column 8, lines 51-60).

3.5 Regarding claim 11, it is inherent that a user may uses mobile station 114 for data transmission at least once per month, therefore, the measuring, determining and comparing steps are repeated monthly.

3.6 Regarding claim 12, Rong teaches selecting a lower data rate or a higher data rate based on the power headroom (column 8, lines 56-63; column 9, lines 4-16).

3.7 Regarding claims 13 and 19, Rong teaches selecting a lower data rate for the receiver of a base station (column 8, line 64 to column 9, line 3).

3.8 Regarding claim 14, it is inherent that the proposed data rate is proposed to the received of a base station only once during a setup period.

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3.9 Regarding claims 15 and 20, Rong teaches using 19.2 kbps as a default rate (column 8, lines 49-56).

4. Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rong et al. US 6,775,548 in view of Honkasalo US 6,137,789 and further in view of Applicant's disclosure (Background art).

The modified Rong's reference, teaches transmitting data at variable data rate based on the available transmission power. Rong further teaches storing relative transmission power at particular data rates for an access channel (column 7, lines 37-47), selecting a data rate for the access channel, and converting the relative transmission power to an absolute transmission power (column 8, lines 51-63).

Rong fails to teach storing relative transmission power for each channel at particular data rates.

However, the Applicant discloses table 1 in the background art, which teaches an IS-98D standard for storing relative transmission power for a plurality of channels at particular data rate (Specification, page 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Rong's reference, which was modified by Honkasalo, with the background art, so that relative transmission power for a plurality of channels would have been stored in a memory, because such modification would have complied with IS-98D standard.

Allowable Subject Matter

5. Claims 3, 7 and 17 are objected to as each being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

6.1 Claims 3 and 17 disclose a method for measuring transmission output power by estimating current transmitter output power by averaging output power over a stated time period. Honaksalo teaches a power indicator by measuring the output of a directional coupler. Since the modified Rong reference is able to measure the current transmitter output power, and a measured output power is much more accurate than an estimated one, therefore, there is no motivation to estimate (instead of measuring) the current output power by averaging output power over a period of time.

6.2 Claim 7 discloses a method for storing relative transmission power for each channel at particular data transmission rate in a memory, and each relative power is stored as a decibel power with reference to one channel. Rong teaches a 3 db output power step for each data rate, but fail to teach this 3 db step is in reference with another channel.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7.1 US 6,366,763 (Ue et al.) discloses a radio communication device and method of controlling transmission rate (figures 23-27).

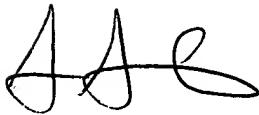
7.2 US 6,337,973 (Agin et al.) discloses a method in mobile communication system using power control.

7.3 US 6,393,276 (Vanghi) discloses a method for open loop power and rate control in a CDMA system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Sing whose telephone number is (703) 305-3221. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached on (703) 305-4895. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or

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relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.



S. Sing

01/07/2005



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